

Package ‘session’

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Description Utility functions for interacting with R processes from external programs. This package includes functions to save and restore session information (including loaded packages, and attached data objects), as well as functions to evaluate strings containing R commands and return the printed results or an execution transcript.

Title Functions for interacting with, saving and restoring R sessions.

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save.session	<i>Save and restore session information, including loaded packages and attached data objects.</i>
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Description

Save and restore session information, including loaded packages and attached data objects.

Usage

```
save.session(file=".RSession", ...)  
restore.session(file=".RSession", ...)
```

Arguments

`file` Filename for the session information.
`...` Optional arguments for `save()` or `load()`.

Details

These two functions save and restore R session information. In addition to the objects in the session, the list of currently loaded packages and the search path are (re)stored.

Open graphics devices, `sink`s, pipes, etc. will not be stored. `save.session` issues a warning to this effect if any graphics devices are open.

Value

No return value.

Note

Future enhancements may allow the restoration of the size, location, and graphics settings of graphics devices.

Author(s)

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See Also

[save](#), [save.image](#), [load](#)

Examples

```
ls(all=TRUE) # show all data objects
search() # list search path

# save the current R session to the file "RSession.Rda"
save.session("RSession.Rda")

## Not run:
# exit R without saving data
q("no")

# restart R
R
## End(Not run)

# load a saved R session from "RSession.Rda"
restore.session("RSession.Rda")

ls(all=TRUE) # show all data objects
search() # list search path
```

texteval	<i>Evaluate string(s) containing R commands and return the text transcript or printed results</i>
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Description

Evaluate string(s) containing R commands and return the text transcript or printed results

Usage

```
capture(expression, collapse=NULL)
texteval(sourceText, collapse=NULL, echo=TRUE)
printed(sourceText, collapse=NULL)
```

Arguments

expression	R expression to be evaluated
sourceText	Vector of string to be evaluated.
collapse	Line separator. Defaults to NULL
echo	Should commands be shown in output. Defaults to TRUE

Details

`capture` captures the results of executing `expression` using a `textConnection`. `texteval` and `printed` parse and evaluate the contents of `sourceText` using `source` and the results are captured using a `textConnection`. If `collapse` is `NULL`, a vector of strings is returned, one element for each line of output. (Empty strings for blank lines). If `collapse` is non-`NULL`, the a single character string is formed by pasting the individuals elements together separated by this value. When `echo` is `TRUE`, `texteval` will return a transcript that includes both printed output and evaluated commands. When `echo` is `FALSE`, `texteval` will return only the printed output. `printed` always returns only the printed output.

These functions were created to allow strings provided from external processes (for example by `rpy` or `RSPerl`) to be evaluated as if they were scripts.

Value

A single character string if `collapse` is non-`NULL`, otherwise a vector of character strings.

Author(s)

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See Also

[source](#), [textConnection](#), [sink](#), [parse](#), [eval](#)

Examples

```
# define a script string
script <- "x <- rnorm(100)\ny <- x + rnorm(100,0.25)\nsummary(lm(y~x))"

# evaluate the script string, returning a transcript.
result <- texteval(script, "\n")
cat(result)

# evaluate the script string, returning the printed output.
result <- printed(script, "\n")
cat(result)
```

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